

What is the Big6?

The Big6, is a research strategy developed by Michael Eisenberg, a university professor and Bob Berkowitz, a school librarian. It was first communicated beyond their classes at the School of Information Studies at Syracuse University in their book *Curriculum Initiative: An Agenda and Strategy for Library Media Programs*, published in 1988. It is an effective tool for helping students learn the research process as an inquiry process.

Most current provincial curriculum documents identify the inquiry process as critical to student learning. The inquiry process for social studies is the research process. The inquiry process for science is the experimental process. The inquiry process for mathematics is the problem solving process. Higher order thinking skills and language skills are the foundation for all inquiry processes. The Ontario Language Curriculum 1-8, identifies this by creating a "Reasoning and Critical Thinking" strand in its expectations for each grade. In each of its other subject documents the inquiry process for that subject is a clear expectation. What these and most provincial curriculum documents don't do however, is provide strategies for achieving these expectations.

The Big6 provides a strategy for developing the foundation of higher order thinking skills and the language skills of reasoning and critical thinking and then applying the understanding of the process and the skills to any inquiry process.

It is a well packaged and well supported information problem solving or research/inquiry strategy that integrates well with provincial curricula, and the school and classroom program. It links the research process and skills to Creative/Critical thinking (Bloom's Taxonomy) so that it clearly articulates the research process as a cognitive process. It works with and through information technology to help students develop information literacy. The Big6 helps students learn the research process as an inquiry process within a curriculum focussed on inquiry.

Would You Want to Use the Big6?

You might not want to use the Big6 because it involves six steps that are

divided into the Little Twelve and students might see this as too much, too complex. In fact many research strategies choose to use 5, 4 or 3 steps to simplify the process for students. On the other hand, if you look at the direct connection to Bloom's Taxonomy, the six steps follow that well known description of thinking skills from lower order to higher order thinking skills.

You might not want to use the Big6 because it was developed and is most widely supported and used in the United States. On the other hand, because it is so inclusive and applicable you might find it integrates easily with your understanding of the research/inquiry process and your province's and school district's curricula. It can be used by and adapted for anyone from kindergarten to old age. It has been formally adapted into The Super 3 for primary students and substantial amount of unit and lesson plan support has been developed for this. The Big6 can be applied as a thinking process to deal with most problems and therefore can be applied consistently and repeatedly throughout the learning program, thereby increasing a student's chances of learning it. It integrates naturally with information technology. It frames the process for information problem solving or inquiry and provides a strategy for teaching information literacy. It has widespread credibility and is adopted throughout the United States and around the world.

You might not want to use the Big6 because you don't know where to start and aren't sure that the support you will need to learn and implement the strategy will be there to help you through your learning of the strategy and how to teach and assess it. The support offered through its website <http://big6.com>, books, newsletter, listserv, Big6 courses, conferences, workshops, workbooks, teaching materials i.e.. transparencies, bookmarks, lesson plans... is extensive. The network of people, schools, school districts and websites involved in the development of effective teaching strategies and materials for the Big6 and in the research to support it is growing.

You might want to use the Big6 because it offers a strongly supported

strategy to help you develop students who can think through the research or inquiry process to meet the curriculum expectations.

How Does the Big6 Work?

The Big6 refers to a six step process for research. The steps include:

1. Task Definition
2. Information Seeking Strategies
3. Location and Access
4. Use of Information
5. Synthesis
6. Evaluation

Each of these steps can be divided into two sub steps, known as the Little Twelve:

1. *Task Definition*
 - 1.1 Define the information problem
 - 1.2 Identify information needed in order to complete the task (to solve the information problem)
2. *Information Seeking Strategies*
 - 2.1 Determine the range of possible sources (brainstorm)
 - 2.2 Evaluate the different possible sources to determine priorities (select the best sources)
3. *Location and Access*
 - 3.1 Locate sources (intellectually and physically)
 - 3.2 Find information within sources
4. *Use of Information*
 - 4.1 Engage (e.g., read, hear, view, touch) the information in a source
 - 4.2 Extract relevant information from a source
5. *Synthesis*
 - 5.1 Organize information from multiple sources
 - 5.2 Present the information
6. *Evaluation*
 - 6.1 Judge the product (effectiveness)
 - 6.2 Judge the information problem solving process (efficiency)

For primary aged students the process is referred to as the Super3:

1. *Beginning*
 - Task Definition
 - Information Seeking Strategies



2. Middle

Location and Access Use of Information

3. End

Synthesis Evaluation

Eisenberg and Berkowitz are quite clear that although the process is described in a linear progression, it tends to loop back on itself when you are working through a research task. For example, a student may need to go back to Information Seeking Strategies when they get to Use of Information and find new questions or not enough information.

The strategy works best when:

- the initial teaching of the strategy involves opportunities to personalize and make the learning relevant, i.e., the problem to be solved is one of getting a gift for someone or going on a trip
- the discreet skills of a step are taught before a student is required to use a step ie. students need to be taught how to analyze an assigned task and how to ask the questions necessary to gain a clear understanding of the teacher/teacher-librarian's expectations, before they should be asked to use the step
- students are given a framework and an expectation for reflection and self evaluation, such as a Research Journal, which will be assessed and responded to on a regular basis by the teacher/teacher-librarian
- evaluation of skills and process are reported to students and parents, i.e., on the report card
- the strategy is used in a variety of contexts throughout the curriculum, with the steps posted in the room, on the desk, in the students' notebooks for easy access and reinforcement
- all teachers are trained and integrate the Big6 throughout their program

- the teacher-librarian leads, trains, supports, mediates, monitors Big6 implementation through school program with a matrix, and facilitates the skills and process being taught and reinforced throughout the school
- parents are informed about the strategy and given the support necessary for them to help their children with homework involving the Big6 strategy
- you personalize the Big6 and integrate it with your provincial/school district/school approach to the inquiry/research process

How Do You Get Started?

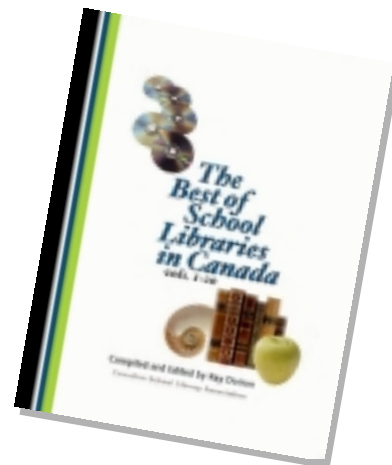
The best way to get started is to go to the Big6 web site at <http://big6.com>. The site offers everything from lesson plans to articles on assessment to detailed information about available resources and how to get them, to workshops and courses and how to access them. The site is an in-depth, well maintained resource that will ensure the success of your inquiry process into the Big6.



Sandra Hughes has been involved with school libraries for 30 years, as a teacher librarian, Media Coordinator, President of the Ontario School Library Association, Editor of the Teaching Librarian journal, and Canadian Director for the International Association of School Libraries, to name some of the highlights. After becoming interested in the Big6 Research Model she went to Syracuse University to take the summer graduate course on the Big6. From the energy created by that experience she worked with the model, wrote and spoke about it in Canada and Australia and integrated it with the model developed by the Ontario School Library Association in her web site, Research Helper, at <http://researchhelper.ca>. She is currently an elementary school principal. Email: sandra.hughes@sympatico.ca

The Best of School Libraries in Canada

The Journal of the Canadian School Library Association



Published by the Canadian School Library Association

\$24.95 each

Send orders to:

**CLA Order Department
Canadian Library Association**
328 Frank St., Ottawa, ON K2P 0X8
(613) 232-9625, Ext. 310
Fax: (613) 563-9895
Email: orders@cla.ca

Playwrights Canada Press • 54 Wolseley Street, Toronto, Ontario M5T 1A5 • 416-703-0013 • orders@playwrightscanada.com



PREPARE TO EMBARK

EDS. SHIRLEY BARRIE & EMIL SHER

Six plays for middle grades. *Beo's Bedroom* and *The Elf in Knight* appeal to younger students. *Cyberteens in Love* and *The Crusader of the World* cater to more mature students. All ages can draw lessons from the young girls whose stories shape *Mella* and *Girl Who Loved Her Horses*.

0-88754-652-8
Grades 5-8

\$19.95



THE NUTMEG PRINCESS

RICHARDO KEENS-DOUGLAS

This jubilant musical play is a celebration of Caribbean lore featuring calypso, music, dancing and singing. The empowering message is, "If you believe in yourself all things are possible."

0-88754-599-8
Grades 5-7

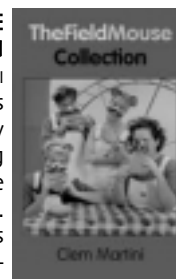
\$12.95

THE FIELDMOUSE COLLECTION

CLEM MARTINI

The Field examines the birth of a new friendship taking place in the shadow of racism. *Mouse* raises questions of conformity and peer pressure within the unique confines of a cage of mice. —Joanne James

0-88754-648-X
Grade 4-6



\$15.95



